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LAND AND WATER SUBCOMMITTEE OF THE ENVIRONMENTAL QUALITY SERVICE COUNCIL

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MEETING MINUTES[1]

Meeting Date:	**October 14, 1999**
Meeting Time:	**10:00 A.M.**
Meeting Place:	**State House, 200 W. Washington St., Room 233**
Meeting City:	**Indianapolis, Indiana**
Meeting Number:	**3**

Members Present: **Sen. Beverly Gard, Chairperson; Sen. Kent Adams; Sen. Vi Simpson; David Benshoof; Michael Carnahan; Kerry Michael Manders; Tim Method; Alice Schloss; Clifford E. Duggan, Jr.; Larry Kane; David Bottorf; Mark Palmer; Maggie McShane; Betsy DuSold; Scott Schutte; Glenn Pratt; Mike Frey; Douglas Bley; Lisa McKinney Goldner; Tonya Galbraith; Miriam Dant; Bill Hayden; Ed Tinkle II.**

Members Absent: **Sen. Glenn Howard; Rep. Mark Kruzan; Randy Edgemon; Regina Mahoney; Lynn Waters; John Kyle; Rae Schnapp; Melanie Darke; Dr. Thomas Simon.**

The Chairperson, Senator Gard, called the meeting to order shortly after 10:00 a.m. After making introductory remarks, she called on **Matthew Rueff**, Assistant Commissioner of the Indiana Department of Environmental

[1] Exhibits and other materials referenced in these minutes can be inspected and copied in the Legislative Information Center in Room 230 of the State House in Indianapolis, Indiana. Requests for copies may be mailed to the Legislative Information Center, Legislative Services Agency, 200 West Washington Street, Indianapolis, IN 46204-2789. A fee of $0.15 per page and mailing costs will be charged for copies. These minutes are also available on the Internet at the General Assembly homepage. The URL address of the General Assembly homepage is http://www.ai.org/legislative/. No fee is charged for viewing, downloading, or printing minutes from the Internet.

Management (IDEM) and head of the Office of Water Management, to speak about the Water Quality Advisory Group.

(1) <u>Report on the Progress of the Water Quality Advisory Group.</u>

Mr. Rueff discussed the recent meetings of the Water Quality Advisory Group, which was established by IDEM in mid-1999 and is made up of representatives of environmental interests and regulated entities. He explained that the Water Quality Advisory Group has been meeting monthly and is trying to frame a policy for the state concerning anti-degradation provisions applying to Indiana's water quality standards.[2] (Mr. Rueff distributed copies of the minutes of the Water Quality Advisory Group meetings of August 11 and September 8, 1999 and copies of materials discussed by the Group at the meeting of October 13, 1999. Copies of these materials are available from the Legislative Information Center (L.I.C.) as "Attachment A" to these minutes.)

Subcommittee members were provided copies of a memo written by **Bill Beranek, Ph.D.** of the Indiana Environmental Institute concerning water quality standards. (A copy of this memo is available from L.I.C. as "Attachment B" to these minutes.) Dr. Beranek's memo traces the history of high quality water body designations in Indiana, noting that the Stream Pollution Control Board declared as early as 1978 that certain high quality waters were to be maintained without degradation in quality. The memo states that currently in Indiana an NPDES permit cannot be changed to allow an increase in the discharge of any constituent into a body of water that is designated as an Outstanding State Resource Water (OSRW).

Dr. Beranek informed the Subcommittee that the Water Quality Advisory Group is discussing a possible change in Indiana from one to two different designations of high quality waters:

> (1) A designation like the current OSRW: If a water body is given this designation, new or increased discharges would be prohibited in order to maintain the quality of the water body.
> (2) A designation unique to Indiana: If a water body were given this designation, new or increased discharges might be allowed if the regulated entity responsible for the discharges took action that would result in a *net improvement* in water quality of the water body.

Sen Gard commented that the definitions are extremely critical to this process.

Mr. Rueff also discussed another advisory group created by IDEM, the Wet Weather Technical Advisory Group. He explained that this advisory group is concerned with the combined sewer systems (which carry both sanitary sewage and storm water runoff) that exist in over 100 cities in Indiana.[3] Mr. Rueff said that the Wet Weather Technical Advisory Group is looking at how the state can work with municipalities on wet weather issues.

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[2]According to information made available by the U.S. EPA, Water Quality Standards for surface waters are established by the States under the federal Clean Water Act. Water quality standards define the water quality goals of a water body by: (1) designating the use or uses to be made of the water; (2) setting criteria necessary to protect the uses; and (3) preventing degradation of water quality through **antidegradation provisions**. The EPA's water quality standards regulation [40 CFR 131] sets out a three-tiered approach to antidegradation provisions: "Tier 1" maintains and protects existing uses and the water quality necessary to protect these uses. "Tier 2" protects the water quality in waters whose quality is better than that necessary to protect "fishable/swimmable" uses of the water body. "Tier 3" protects outstanding national resource waters (ONRWs), which are provided the highest level of protection under the antidegradation policy. [www.epa.gov/region08/water/wqs/wqs.html]

[3]According to IDEM's Combined Sewer Overflow Strategy (May, 1996), wet weather presents a special problem to a city that has combined sewers: "During wet weather events, flows often exceed the capacity of the wastewater treatment facility, sewer system and diversion devices, resulting in a combination of sewage, industrial flows and storm water discharge to surface waters via CSO outfalls... These overflows can cause water quality standard violations and designated use impairment in receiving waters."

(2) <u>Discussion of Water Quality Issues</u>.

The next speaker to address the Subcommittee was **Scott Schutte** of the City of Indianapolis, who discussed the effect that the Total Maximum Daily Load Program has upon municipalities.[4]

Mr. Schutte referred to the draft rules that have been prepared by IDEM to: (1) develop a list of water bodies within Indiana to receive special designation; and (2) review the state's water quality standards (the "triennial review" required by 26 U.S.C. 1313(c)). Mr. Schutte said that these rules would allow the use of "biocriteria" in the total maximum daily load (TMDL) program, and he suggested that some fine tuning of the concept of biocriteria is necessary.

Referring to the designation of the use or uses to be made of a body of water as the first step in the application of water quality standards to that water body, Mr. Schutte argued that Indiana should recognize use designations other than "swimmable" and "fishable." He pointed out that the circumstances of Indiana water bodies vary greatly -- i.e., the habitat of downtown Indianapolis is far different from that of the Hoosier National Forest. Mr. Schutte urged IDEM to recognize other use designations before beginning to implement the TMDL program.

Mr. Schutte also made this point: In developing TMDLs, a state agency really needs to know the water quality of a body of water. Indianapolis has spent 10 years monitoring its streams and has compiled much valuable water quality data. Yet IDEM, without the benefit of this data, is trying to implement the TMDL program with respect to the waters in Indianapolis within just two or three years. IDEM should work together with all affected parties and entities. If all of the stakeholders are not involved in the TMDL process, you won't get cooperation when it comes to implementation.

Glenn Pratt recalled that there was a bill in the 1999 session of the General Assembly that would have raised funding to address the problem of agricultural non-point runoff. He suggested that IDEM and the Department of Natural Resources should work together on the problem of agricultural runoff, and he expressed hope that the bill would be introduced again in the 2000 session. Senator Gard commented that she sees a benefit in the proposed increase in funding and that this subject could be discussed at the meeting on November 19 at which the Subcommittee will craft its recommendations.

The Subcommittee next heard from **Jim Meyer**, an attorney who represents the City of Gary and the Gary Sanitary District. Mr. Meyer pointed out that the anti-degradation provisions of the water quality standards and the TMDL program can be especially burdensome for a city like Gary, which has lost half of its population and about two-thirds of its tax base and is trying to rejuvenate itself economically.

Mr. Meyer asserted that anti-degradation, no matter how it is defined, must in practice be something that the

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[4]According to a fact sheet issued by IDEM, the states are required by Section 303(d) of the federal Clean Water Act [23 U.S.C. 1313(d)] to identify waters that do not meet or are not expected to meet applicable water quality standards through federal technology-based standards alone. States are required to develop a priority ranking for these waters, taking into account the severity of the pollution and the designated uses of the waters. Once this listing and ranking of waters is completed, the states are required to develop **Total Maximum Daily Loads (TMDLs)** for these waters in order to achieve compliance with the water quality standards. To implement the TMDL program, IDEM is required to:

(1) identify "parameters of concern" for each impaired water body (such as ammonia, lack of dissolved oxygen, cyanide, and impaired biotic communities);

(2) develop restrictions and requirements to address these parameters (i.e., upper limits called "Waste Load Allocations" for point sources and best management practices and other requirements for non-point sources); and

(3) implement the restrictions and requirements through programs for point sources and non-point sources.

The process will take two to three years for each body of water and will involve the following four steps: Planning; Sampling/Data Collection; Modeling; and Implementation.

taxpayers are willing to pay for. He expressed concern about the effect that strict anti-degradation provisions would have on Gary's efforts to attract new business.

Mr. Meyer noted that Gary is currently going through the TMDL process and he urged recognition of the fact that the Grand Calumet River is currently being dredged to remove pollutants that are present in the Grand Calumet's sediments. He asked IDEM not to impose TMDL restrictions on Gary based upon the presence in the river bottom of pollutants that will be removed by the time that the TMDL process is finished.

Mr. Meyer conceded that, in regard to these matters, it would be hard to come up with answers that satisfy everyone. However, he asserted that the State must maintain flexibility, keep its eyes on the ultimate goal of environmental improvement, and make sure that everyone has adequate input.

Bill Hayden commented that the Grand Calumet River is affected by pollution from sources other than its sediments, including leachate from land fills and air deposition.

The next speaker to address the Subcommittee was **Art Umble** of the City of Elkhart's Department of Public Works and Utilities.

Mr. Umble, a member of IDEM's Wet Weather Advisory Group, pointed out that water quality standards are linked to designated uses of the water body and that Indiana has only two use standards, "fishable" and "swimmable." The achievement of water quality consistent with these two uses is the goal we are all trying to achieve, he said, but the challenge is to understand *how* we are going to achieve it.

Mr. Umble made these comments: Sixty percent of Elkhart's sewers are combined sewers. In dry conditions Elkhart's system handles the sewer flow to its waste water treatment plant adequately. However, in heavy rainfall events the system is unable to process the entire flow, and this affects Elkhart's efforts to meet water quality standards. He wants very much to meet the standards but is hampered in doing so by the stochastic (random) nature of rainfall events. Perhaps we need to forge a better congruence between the stochastic nature of rainfall and the measures for achievement of the water quality standards.

Mr. Umble informed the Subcommittee that the Wet Weather Advisory Group has discussed four proposals:

1. Modify the use designations.
2. Temporarily suspend a water body's designated use during a wet weather event.
3. Modify the numerical criteria for bacteriological standards.
4. Institute tiered limits during wet weather.

Mr. Umble added that the Wet Weather Advisory Group intends to complete a written draft by early November to explain its proposals for addressing the wet weather dilemma.

Glenn Pratt commented that the environmental community has long supported tiered limits during wet weather. Bill Hayden pointed out that the need to protect existing uses of a water body arises from the *federal* (not state) law. He also stated that communities should consider the water pollution consequences of allowing more and more new houses to be connected to sewer systems despite knowing that the systems cannot handle the entire flow they will receive during wet weather conditions.

Matt Rueff then introduced the next speakers: Jan Henley, chief of IDEM's Assessment Branch, and Cynthia L. Wagner, Senior Environmental Manager, Toxicology and Chemistry Section, IDEM Office of Water Management.

Cynthia L. Wagner made a presentation to the Subcommittee on IDEM's Total Maximum Daily Load Program. (A document including copies of the slides that Ms. Wagner projected as part of her presentation is available from L.I.C. as "Attachment C" to these minutes.) Ms. Wagner made the following points:

- IDEM's TMDL Program is mandated by section 303(d) of the federal Clean Water Act, which requires each state to identify waters that are impaired and then to establish total maximum daily loads for those waters to ensure that the waters will attain water quality standards. In compliance with this mandate, IDEM submitted to the U.S. Environmental Protection Agency (EPA) a list of Indiana's impaired waters, identified by location and "parameters of concern" and ranked according to severity of impairment (either high, medium, or low). IDEM developed this list over the last three years, and it identifies 208 Indiana waters as impaired. The list was approved by the EPA on February 16, 1999. The list and an explanation of the process used by IDEM to compile the list are available on IDEM's Internet web site.[5]

- The Office of Water Management is getting organized to take on the challenges of the TMDL Program. Ms. Wagner assumed responsibility for the Program in April and three additional staff members will be transferred from the modeling section to the TMDL Program.

- What is a "total maximum daily load"? It is the total load (of a particular substance, etc.) that a water body can receive without going beyond applicable water quality standards. TMDLs must be established at a level to ensure attainment of the water quality standards, considering seasonal variations and stream flow.

- To perform a TMDL evaluation, IDEM must determine what water quality standard is being violated and identify the cause of the violation. Of greatest importance is the implementation of a plan to resolve the violation. An implementation plan must include specific actions, tools and methods, schedules, and milestones, and must provide for follow-up monitoring. It must also take into consideration a method to modify or reverse the initial plan if water quality is not being achieved as expected.

- The TMDL process consists of three phases:
  Phase 1: Planning, sampling, collection of data.
  Phase 2: Identifying a numeric standard needed to eliminate the impairment.
  Phase 3: Implementation of the needed standard.

- In the TMDL process with respect to any particular stream segment, it will take from three to five years to get to the implementation phase, and then it may take an additional period of years before the improvement in water quality can be seen.

- IDEM has made a two-year commitment is to look at 12 streams with 11 impairments. It is using contractor support to meet this commitment. There are two water bodies of particular importance: The Wildcat Creek Watershed and the Grand Calumet River.

- The Wildcat Creek Watershed is the model watershed for IDEM. EPA has provided a contractor to work with IDEM on it. There are five impaired stream segments, and the contractor has enough money to work on three.

- The Grand Calumet River and Indiana Harbor Ship Canal is a larger TMDL project. The Army Corps of Engineers is working with IDEM on it and financing its work with federal funds. The Grand Calumet is an extremely complex system with five impaired segments and multiple impairments.

- The importance of stakeholder involvement in the TMDL process cannot be overemphasized.

Ms. Wagner distributed copies of a color map that indicated the location of Indiana bodies of water that are listed as impaired under Section 303(d) of the federal Clean Water Act. In response to a comment from Mike Carnahan, Ms. Wagner pointed out the streams appearing in blue on the map have not been evaluated under the

[5]See www.ai.org/idem/owm/planbr/wqs/listing.html and www.ai.org/idem/owm/planbr/wqs/303d.html.

TMDL Program and found to be *unimpaired*; instead, they are streams that have not yet been evaluated. (A copy of the map and the color-coded table of information that accompanied it are available from L.I..C. as “Attachment D” to these minutes.)

Glenn Pratt said he is glad that Ms. Wagner is managing the TMDL Program. However, he expressed concern that the Program's staff will not be large enough to be successful.

Jan Henley, chief of the Assessment Branch of IDEM's Office of Water Management, said that IDEM uses "probabilistic sampling" in the TMDL process and has changed its strategy to maximize the resources within the Assessment Branch.

Douglas Bley expressed the opinion that more funding for water quality monitoring is needed so that more streams could be monitored and each stream could be monitored more frequently. Bill Hayden, concurring in Mr. Bley's point, questioned the adequacy of the probabilistic monitoring employed by IDEM.[6]

In response to a question from Ed Tinkle, Matthew Rueff said that the city of Indianapolis is aware that the TMDL Program will soon focus on the water bodies within its area.

Vince Griffin asked what would follow the completion of the TMDL process in a particular area. The IDEM officers replied as follows: IDEM will work with the affected communities on the things the communities will need to do. For example, IDEM might assist a community in obtaining a grant in order to put in buffer strips along the stream. Additional discharge limits might be imposed upon a business following the TMDL process, but this would be done through the permitting process.

Senator Gard, with respect to water quality matters, called for better coordination between those involved in natural resources issues and those involved in environmental issues.

(3) <u>Voluntary Cleanup/Brownfield Statutes</u>

Staff distributed copies of an October 7, 1999 memo from Regina Mahoney to Senator Gard. (A copy of the memo is available from L.I..C. as “Attachment E” to these minutes.) This memo reported on an initiative to prepare potential amendments Indiana's voluntary cleanup statute. It made these points:

- As proposed at the Land & Water Subcommittee meeting of September 3, a group of interested persons has begun to consider the possibility of proposing legislation to amend Indiana's law on the voluntary remediation of contaminated sites.
- Staff has provided the group with information on the Brownfields/Voluntary Remediation programs of Illinois, Michigan, Ohio, Pennsylvania and Texas for purposes of comparison to Indiana's statute and program.
- The group will meet soon.

(4) <u>The Hazardous Waste Manifest Program</u>.

(5) <u>The Transition Period Associated with IDEM's RISC Document</u>.

Time did not permit the discussion of these two final agenda items, both of which had been discussed at previous meetings.

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[6]IDEM's statement on the "Listing Process Used by Indiana to Develop the 1998 303(d) List" includes the following information: "IDEM has recently implemented a new basin approach to monitoring the State's waters. The monitoring strategy includes a probabilistic monitoring program which will rotate through all of the (river) basins in the State on a five year schedule and an expanded State-wide fixed station monitoring network of over 150 sites."

Senator Gard announced that the Subcommittee, at its meeting on November 19, will decide on its formal recommendations to the full EQSC with respect to the issues assigned to the Subcommittee. She invited Subcommittee members to submit their recommendations on the Subcommittee's issues to staff in writing. Staff, she said, will compile all the recommendations submitted by members and, on November 19, the Subcommittee will study the members' recommendations, looking for common themes.

Senator Gard adjourned the meeting at approximately 12:45 p.m.